

## ABSTRACT

The invention relates to an expression-silencing system comprising a first DNA construct comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene (T7-pol) which carries an NLS sequence, and at least one promoter and at least one terminator sequence operably linked to the T7-pol; a second DNA construct comprising a T7 promoter sequence (pT7), at least one targeting sequence downstream to said pT7 and at least one 3' non-translated terminator sequence operably linked to the targeting sequence; which system can, upon its introduction into a cell, substantially silence the expression at the RNA level of a target sequence in the cell, in a tissue or organ regenerated from said cell, or in a progeny thereof, substantially silenced, by causing the substantial disappearance of the RNA or RNA transcript carrying said sequence or a functional part thereof.